

Exhibit B
BLAST of SEQ ID NO:23 versus Human genome

MEGABLAST 1.2.3-Paracel [2001-11-20]

Reference:

Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
"A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.

Database: Homo_sapiens.latestgp.masked.fa

44,521 sequences; 200,768,834,160 total letters

Query= seqid23

(3660 letters)

	Score	E
	(bits)	Value

AC007600.5.1.183083

505 e-140

AC096996.1.1.194627

454 e-124

>AC007600.5.1.183083

Length = 183083

Score = 505 bits (255), Expect = e-140

Identities = 255/255 (100%)

Strand = Plus / Plus

Query: 1355 agaagtttttctccaggagagccctgttttctatgtccagacattacaagaccccagca 1414
|||||
Sbjct: 46566 agaagtttttctccaggagagccctgttttctatgtccagacattacaagaccccagca 46625

Query: 1415 aagctctggtctttgaggaggccacctgtgtcatggcaacagacctgtcccgggatcgta 1474
|||||
Sbjct: 46626 aagctctggtctttgaggaggccacctgtgtcatggcaacagacctgtcccgggatcgta 46685

Query: 1475 atggggcactggagctggagaggaacgggcatgcttctgaggggatgaccaggcctagag 1534
|||||
Sbjct: 46686 atggggcactggagctggagaggaacgggcatgcttctgaggggatgaccaggcctagag 46745

Query: 1535 atgccctcgggccagaggaagaaggaacagcctgggccagagttgcacaagatcaacc 1594
|||||
Sbjct: 46746 atgccctcgggccagaggaagaaggaacagcctgggccagagttgcacaagatcaacc 46805

Query: 1595 tgggtggtgtccaagg 1609
|||||
Sbjct: 46806 tgggtggtgtccaagg 46820

Score = 458 bits (231), Expect = e-125

Identities = 234/235 (99%)

Strand = Plus / Plus

Query: 544 atattgattataccaaagatcctggaatattcagaagagcagttggggaatgttgtccat 603
|||||
Sbjct: 34936 atattgattataccaaagatcctggaatattcagaagagcagttggggaatgttgtccat 34995

Query: 604 ggagtgggactctgctttgccctttttctctccgaatgtgtgaagtctctgagtttctcc 663
|||||

Sbjct: 34996 ggagtgaggactctgctttgccctttttctctccgaatgtgtgaagtctctgagtttctcc 35055

Query: 664 tccagttggatcatcaaccaacgcacagccatcaggttccaagcagctgtttctctctt 723

|||||
Sbjct: 35056 tccagttggatcatcaaccaacgcacagccatcaggttccgagcagctgtttctctctt 35115

Query: 724 gcctttgagaagctcatccaatttaagtctgtaatacacatcacctcaggagagg 778

|||||
Sbjct: 35116 gcctttgagaagctcatccaatttaagtctgtaatacacatcacctcaggagagg 35170

Score = 454 bits (229), Expect = e-124
Identities = 229/229 (100%)
Strand = Plus / Plus

Query: 2217 ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg 2276

|||||
Sbjct: 70337 ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg 70396

Query: 2277 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 2336

|||||
Sbjct: 70397 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 70456

Query: 2337 ggtcctgtccttaatggtgatcgccgtcctggtgattgtcagtggtgtctccatatat 2396

|||||
Sbjct: 70457 ggtcctgtccttaatggtgatcgccgtcctggtgattgtcagtggtgtctccatatat 70516

Query: 2397 cctgttaatgggagccataatcatggttatttgcttcatttatttatatg 2445

|||||
Sbjct: 70517 cctgttaatgggagccataatcatggttatttgcttcatttatttatatg 70565

Score = 408 bits (206), Expect = e-110
Identities = 206/206 (100%)
Strand = Plus / Plus

Query: 1877 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936

|||||
Sbjct: 57285 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 57344

Query: 1937 gcgccgtctattccgaccgtcagatctacctgctggacgacccctgtctgctgtggacg 1996

|||||
Sbjct: 57345 gcgccgtctattccgaccgtcagatctacctgctggacgacccctgtctgctgtggacg 57404

Query: 1997 cccacgtggggaagcacatttttgaggagtgcatthaagaagacactcagggggaagacgg 2056

|||||
Sbjct: 57405 cccacgtggggaagcacatttttgaggagtgcatthaagaagacactcagggggaagacgg 57464

Query: 2057 tcgtcctggtgacccaccagctgcag 2082

|||||
Sbjct: 57465 tcgtcctggtgacccaccagctgcag 57490

Score = 385 bits (194), Expect = e-103
Identities = 194/194 (100%)

Strand = Plus / Plus

Query: 2857 aagatgtgtgtctcgggaagctcctttacacatggaaggcacaagttgtccccaggggtgg 2916
|||||
Sbjct: 80649 aagatgtgtgtctcgggaagctcctttacacatggaaggcacaagttgtccccaggggtgg 80708

Query: 2917 ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc 2976
|||||
Sbjct: 80709 ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc 80768

Query: 2977 accgtgcttcacggcatcaacctgaccatccgcggccacgaagtgggtgggcatcgtggga 3036
|||||
Sbjct: 80769 accgtgcttcacggcatcaacctgaccatccgcggccacgaagtgggtgggcatcgtggga 80828

Query: 3037 aggacgggctctgg 3050
|||||
Sbjct: 80829 aggacgggctctgg 80842

Score = 371 bits (187), Expect = 2e-99
Identities = 187/187 (100%)
Strand = Plus / Plus

Query: 2583 gtttaagaggctgactgatgcgagaataactacctgctgttgtttctatcttccacacg 2642
|||||
Sbjct: 73139 gtttaagaggctgactgatgcgagaataactacctgctgttgtttctatcttccacacg 73198

Query: 2643 atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt 2702
|||||
Sbjct: 73199 atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt 73258

Query: 2703 cgtggcttttggcatttctccacccccctactcctttaagtcattggctgtcaacatcgt 2762
|||||
Sbjct: 73259 cgtggcttttggcatttctccacccccctactcctttaagtcattggctgtcaacatcgt 73318

Query: 2763 gctgcag 2769
|||||
Sbjct: 73319 gctgcag 73325

Score = 347 bits (175), Expect = 3e-92
Identities = 178/179 (99%)
Strand = Plus / Plus

Query: 776 aggccatcagcttcttcaccggtgatgtaaactacctgtttgaaggggtgtgctatggac 835
|||||
Sbjct: 41478 aggccatcagcttcttcaccggtgatgtaaactacctgtttgaaggggtgtgctatggac 41537

Query: 836 ccctagtactgatcacctgcgcacgcgtggatcatctgcagcatttcttccctacttcatta 895
|||||
Sbjct: 41538 ccctagtactgatcacctgcgcacgcgtggatcatctgcagcatttcttccctacttcatta 41597

Query: 896 ttggatacactgcatttattgccatcttatgctatctcctgggttttccactggaggta 954
|||||
Sbjct: 41598 ttggatacactgcatttattgccatcttatgctatctcctgggttttccactggaggta 41656

Score = 337 bits (170), Expect = 3e-89
Identities = 170/170 (100%)
Strand = Plus / Plus

Query: 3401 agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 3460
|||||
Sbjct: 90103 agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 90162

Query: 3461 agcgcacaaatccgtgaagccttcagggtgcaccgtgctcgctcattgccaccgtgtca 3520
|||||
Sbjct: 90163 agcgcacaaatccgtgaagccttcagggtgcaccgtgctcgctcattgccaccgtgtca 90222

Query: 3521 ccactgtgctgaactgtgaccacatcctgggttatgggcaatgggaaggtg 3570
|||||
Sbjct: 90223 ccactgtgctgaactgtgaccacatcctgggttatgggcaatgggaaggtg 90272

Score = 321 bits (162), Expect = 2e-84
Identities = 162/162 (100%)
Strand = Plus / Plus

Query: 235 aggtttcctgccccccagccctggacaatgctggcctgttctcctacctcaccgtgtca 294
|||||
Sbjct: 29801 aggtttcctgccccccagccctggacaatgctggcctgttctcctacctcaccgtgtca 29860

Query: 295 tggctcaccccgctcatgatccaaagcttacggagtcgcttagatgagaacaccatccct 354
|||||
Sbjct: 29861 tggctcaccccgctcatgatccaaagcttacggagtcgcttagatgagaacaccatccct 29920

Query: 355 ccactgtcagtcctcatgatgcctcagacaaaaatgtccaaagg 396
|||||
Sbjct: 29921 ccactgtcagtcctcatgatgcctcagacaaaaatgtccaaagg 29962

Score = 319 bits (161), Expect = 7e-84
Identities = 161/161 (100%)
Strand = Plus / Plus

Query: 3049 gggaagtcctccttgggcatggctctcttcgcctggtggagcccatggcaggccggatt 3108
|||||
Sbjct: 82347 gggaagtcctccttgggcatggctctcttcgcctggtggagcccatggcaggccggatt 82406

Query: 3109 ctcatcgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 3168
|||||
Sbjct: 82407 ctcatcgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 82466

Query: 3169 gtgatccctcaagatccagtgtgctctcaggaacctcag 3209
|||||
Sbjct: 82467 gtgatccctcaagatccagtgtgctctcaggaacctcag 82507

Score = 299 bits (151), Expect = 6e-78
Identities = 151/151 (100%)

Strand = Plus / Plus

Query: 393 aaggcttcaccgcctttgggaagaagaagtctcaaggcgagggattgaaaaagcttcagt 452
|||||
Sbjct: 33335 aaggcttcaccgcctttgggaagaagaagtctcaaggcgagggattgaaaaagcttcagt 33394

Query: 453 gcttctggtgatgctgaggttccagagaacaaggttgattttcgatgcacttctgggcat 512
|||||
Sbjct: 33395 gcttctggtgatgctgaggttccagagaacaaggttgattttcgatgcacttctgggcat 33454

Query: 513 ctgcttctgcattgccagtgtactcggggcca 543
|||||
Sbjct: 33455 ctgcttctgcattgccagtgtactcggggcca 33485

Score = 297 bits (150), Expect = 3e-77
Identities = 150/150 (100%)
Strand = Plus / Plus

Query: 950 aggtattcatgacaagaatggctgtgaaggctcagcatcacacatctgaggtcagcgacc 1009
|||||
Sbjct: 42421 aggtattcatgacaagaatggctgtgaaggctcagcatcacacatctgaggtcagcgacc 42480

Query: 1010 agcgcacccgtgtgaccagtgaagttctcattgcattaagctgattaaaatgtacacat 1069
|||||
Sbjct: 42481 agcgcacccgtgtgaccagtgaagttctcattgcattaagctgattaaaatgtacacat 42540

Query: 1070 gggagaaaccatttgcaaaaatcattgaag 1099
|||||
Sbjct: 42541 gggagaaaccatttgcaaaaatcattgaag 42570

Score = 293 bits (148), Expect = 4e-76
Identities = 151/152 (99%)
Strand = Plus / Plus

Query: 1098 agacctaagaaggaaggaaaggaagctattggagaagtgcgggcttgtccagagcctgac 1157
|||||
Sbjct: 42736 agacctaagaaggaaggaaaggaagctattggagaagtgcgggcttgtccagagcctgac 42795

Query: 1158 aagtataaccttgttcatcatccccacagtggccacagcggctctgggttctcatccacac 1217
|||||
Sbjct: 42796 aagtataaccttgttcatcatccccacagtggccacagcggctctgggttctcatccacac 42855

Query: 1218 atccttaaagctgaaactcacagcgtcaatgg 1249
|||||
Sbjct: 42856 atccttaaagctgaaactcacagcgtcaatgg 42887

Score = 289 bits (146), Expect = 6e-75
Identities = 188/202 (93%)
Strand = Plus / Plus

Query: 1877 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
|||||

Sbjct: 142145 agattggggagcggggctcaacctctctgggggagagggagaggattagcctggccc 142204

Query: 1937 ggcgcgtctattccgaccgtcagatctacctgctggacgacccccctgtctgctgtggacg 1996
|||||

Sbjct: 142205 ggcgtgtctactccgaccgtcagctctacctgctggacgacccccctgtcgggcgtggacg 142264

Query: 1997 cccacgtggggaagcacatttttgaggagtgcattaagaagacactcagggggaagacgg 2056
|||||

Sbjct: 142265 cccacgtggggaagcacgtctttgaggagtgcattaagaagacgctcaggggaaagacag 142324

Query: 2057 tcgtcctggtgacccaccagct 2078
|||||

Sbjct: 142325 tcgtcctggtgacccaccagct 142346

Score = 278 bits (140), Expect = 2e-71
Identities = 140/140 (100%)
Strand = Plus / Plus

Query: 2445 gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 2504
|||||

Sbjct: 70675 gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 70734

Query: 2505 attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 2564
|||||

Sbjct: 70735 attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 70794

Query: 2565 tgaagacttcatcagccagt 2584
|||||

Sbjct: 70795 tgaagacttcatcagccagt 70814

Score = 278 bits (140), Expect = 2e-71
Identities = 140/140 (100%)
Strand = Plus / Plus

Query: 2080 cagtacttagaattttgtggccagatcattttgttgaaaaatgggaaaatctgtgaaaaat 2139
|||||

Sbjct: 59486 cagtacttagaattttgtggccagatcattttgttgaaaaatgggaaaatctgtgaaaaat 59545

Query: 2140 ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 2199
|||||

Sbjct: 59546 ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 59605

Query: 2200 cacaaggaagccacttcggt 2219
|||||

Sbjct: 59606 cacaaggaagccacttcggt 59625

Score = 276 bits (139), Expect = 9e-71
Identities = 139/139 (100%)
Strand = Plus / Plus

Query: 100 aaaacctatactctccaagatggcccctggagtcagcaagagagaaatcctgaggctcca 159
|||||

Sbjct: 27194 aaaacctatactctccaagatggccccctggagtcagcaagagagaaatcctgagggtcca 27253

Query: 160 gggagggcagctgtcccaccgtgggggaagtatgatgctgccttgagaacctgattccc 219
|||||
Sbjct: 27254 gggagggcagctgtcccaccgtgggggaagtatgatgctgccttgagaacctgattccc 27313

Query: 220 ttccgtcccaagccgaggt 238
|||||
Sbjct: 27314 ttccgtcccaagccgaggt 27332

Score = 252 bits (127), Expect = 1e-63
Identities = 127/127 (100%)
Strand = Plus / Plus

Query: 1679 agatgcacttgctcgagggctcggtgggggtgcaggaagcctggcctatgtccccccagc 1738
|||||
Sbjct: 52228 agatgcacttgctcgagggctcggtgggggtgcaggaagcctggcctatgtccccccagc 52287

Query: 1739 aggcctggatcgctcagcgggaacatcagggagaacatcctcatgggagggcgcatatgaca 1798
|||||
Sbjct: 52288 aggcctggatcgctcagcgggaacatcagggagaacatcctcatgggagggcgcatatgaca 52347

Query: 1799 aggcccg 1805
|||||
Sbjct: 52348 aggcccg 52354

Score = 226 bits (114), Expect = 8e-56
Identities = 114/114 (100%)
Strand = Plus / Plus

Query: 3289 atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 3348
|||||
Sbjct: 87547 atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 87606

Query: 3349 gtgggggagaggcagctgctctgcattgccagggtgtgcttcgcaactccaag 3402
|||||
Sbjct: 87607 gtgggggagaggcagctgctctgcattgccagggtgtgcttcgcaactccaag 87660

Score = 216 bits (109), Expect = 7e-53
Identities = 109/109 (100%)
Strand = Plus / Plus

Query: 1248 ggccttcagcatgctggcctccttgaatctccttcggctgtcagtggttctttgtgcctat 1307
|||||
Sbjct: 44216 ggccttcagcatgctggcctccttgaatctccttcggctgtcagtggttctttgtgcctat 44275

Query: 1308 tgcagtcaaaggtctcacgaattccaagtctgcagtgatgaggttcaag 1356
|||||
Sbjct: 44276 tgcagtcaaaggtctcacgaattccaagtctgcagtgatgaggttcaag 44324

Score = 196 bits (99), Expect = 7e-47

Identities = 99/99 (100%)
Strand = Plus / Plus

Query: 1 atgactaggaagaggacatactgggtgcccaactcttctggtggcctcgtgaatcgtggc 60
|||||
Sbjct: 25846 atgactaggaagaggacatactgggtgcccaactcttctggtggcctcgtgaatcgtggc 25905

Query: 61 atcgacataggcgatgacatggtttcaggacttatttat 99
|||||
Sbjct: 25906 atcgacataggcgatgacatggtttcaggacttatttat 25944

Score = 188 bits (95), Expect = 2e-44
Identities = 95/95 (100%)
Strand = Plus / Plus

Query: 3566 aggtggtagaatttgatcgccggagggtactgcggaagaagcctgggtcattgttcgcag 3625
|||||
Sbjct: 90397 aggtggtagaatttgatcgccggagggtactgcggaagaagcctgggtcattgttcgcag 90456

Query: 3626 ccctcatggccacagccacttcttctactgagataa 3660
|||||
Sbjct: 90457 ccctcatggccacagccacttcttctactgagataa 90491

Score = 182 bits (92), Expect = 1e-42
Identities = 92/92 (100%)
Strand = Plus / Plus

Query: 2768 agctggcgctccagcttccaggccactgcccggattggcttggagacagaggcacagttca 2827
|||||
Sbjct: 79077 agctggcgctccagcttccaggccactgcccggattggcttggagacagaggcacagttca 79136

Query: 2828 cggctgtagagaggatactgcagtacatgaag 2859
|||||
Sbjct: 79137 cggctgtagagaggatactgcagtacatgaag 79168

Score = 161 bits (81), Expect = 4e-36
Identities = 81/81 (100%)
Strand = Plus / Plus

Query: 3208 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 3267
|||||
Sbjct: 86796 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 86855

Query: 3268 aggacattcctgaccaaggcc 3288
|||||
Sbjct: 86856 aggacattcctgaccaaggcc 86876

Score = 147 bits (74), Expect = 6e-32
Identities = 74/74 (100%)
Strand = Plus / Plus

Query: 1805 gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 1864
|||||
Sbjct: 54466 gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 54525

Query: 1865 gagacatgacagag 1878
|||||
Sbjct: 54526 gagacatgacagag 54539

Score = 147 bits (74), Expect = 6e-32
Identities = 74/74 (100%)
Strand = Plus / Plus

Query: 1607 aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 1666
|||||
Sbjct: 49269 aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 49328

Query: 1667 ccatacctggaggag 1680
|||||
Sbjct: 49329 ccatacctggaggag 49342

>AC096996.1.1.194627
Length = 194627

Score = 454 bits (229), Expect = e-124
Identities = 229/229 (100%)
Strand = Plus / Minus

Query: 2217 gggtttccgctgccccatgagtttctttgacaccatcccaataggccggttttgaactg 2276
|||||
Sbjct: 173330 gggtttccgctgccccatgagtttctttgacaccatcccaataggccggttttgaactg 173271

Query: 2277 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 2336
|||||
Sbjct: 173270 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 173211

Query: 2337 ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgctgtctccatatat 2396
|||||
Sbjct: 173210 ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgctgtctccatatat 173151

Query: 2397 cctgttaatgggagccataatcatgggtattttgcttcatttattatatg 2445
|||||
Sbjct: 173150 cctgttaatgggagccataatcatgggtattttgcttcatttattatatg 173102

Score = 408 bits (206), Expect = e-110
Identities = 206/206 (100%)
Strand = Plus / Minus

Query: 1877 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
|||||
Sbjct: 186382 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 186323

Query: 1937 ggcgcgtctattccgaccgtcagatctacctgctggacgacccccctgtctgctgtggacg 1996
|||||

Sbjct: 186322 gcgcgctctattccgaccgtcagatctacctgctggacgacccccctgtctgctgtggacg 186263

Query: 1997 cccacgtggggaagcacatttttgaggagtgcattaagaagacactcagggggaagacgg 2056

|||||
Sbjct: 186262 cccacgtggggaagcacatttttgaggagtgcattaagaagacactcagggggaagacgg 186203

Query: 2057 tcgtcctggtgacccaccagctgcag 2082

|||||
Sbjct: 186202 tcgtcctggtgacccaccagctgcag 186177

Score = 385 bits (194), Expect = e-103
Identities = 194/194 (100%)
Strand = Plus / Minus

Query: 2857 aagatgtgtgtctcgggaagctcctttacacatggaaggcacaagttgtccccaggggtgg 2916

|||||
Sbjct: 163018 aagatgtgtgtctcgggaagctcctttacacatggaaggcacaagttgtccccaggggtgg 162959

Query: 2917 ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc 2976

|||||
Sbjct: 162958 ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc 162899

Query: 2977 accgtgcttcacggcatcaacctgaccatccgcggccacgaagtgggtgggcatcggtggga 3036

|||||
Sbjct: 162898 accgtgcttcacggcatcaacctgaccatccgcggccacgaagtgggtgggcatcggtggga 162839

Query: 3037 aggacgggctcttg 3050

|||||
Sbjct: 162838 aggacgggctcttg 162825

Score = 371 bits (187), Expect = 2e-99
Identities = 187/187 (100%)
Strand = Plus / Minus

Query: 2583 gtttaagaggctgactgatgcgcagaataactacctgctggtgtttctatcttccacacg 2642

|||||
Sbjct: 170528 gtttaagaggctgactgatgcgcagaataactacctgctggtgtttctatcttccacacg 170469

Query: 2643 atggatggcattgaggctggagatcatgaccaaccttgtagccttggtgttgccctggt 2702

|||||
Sbjct: 170468 atggatggcattgaggctggagatcatgaccaaccttgtagccttggtgttgccctggt 170409

Query: 2703 cgtggccttttggcatttccctccacccccctactcctttaagtcattggctgtcaacatcgt 2762

|||||
Sbjct: 170408 cgtggccttttggcatttccctccacccccctactcctttaagtcattggctgtcaacatcgt 170349

Query: 2763 gctgcag 2769

|||||
Sbjct: 170348 gctgcag 170342

Score = 337 bits (170), Expect = 3e-89
Identities = 170/170 (100%)

Strand = Plus / Minus

Query: 3401 agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 3460
|||||
Sbjct: 153564 agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 153505

Query: 3461 agcgcacaatccgtgaagccttcagggtgcaccgtgctcgtcattgcccaccgtgtca 3520
|||||
Sbjct: 153504 agcgcacaatccgtgaagccttcagggtgcaccgtgctcgtcattgcccaccgtgtca 153445

Query: 3521 ccactgtgctgaactgtgaccacatcctgggttatgggcaatgggaaggtg 3570
|||||
Sbjct: 153444 ccactgtgctgaactgtgaccacatcctgggttatgggcaatgggaaggtg 153395

Score = 319 bits (161), Expect = 7e-84
Identities = 161/161 (100%)
Strand = Plus / Minus

Query: 3049 ggggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 3108
|||||
Sbjct: 161320 ggggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 161261

Query: 3109 ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 3168
|||||
Sbjct: 161260 ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 161201

Query: 3169 gtgatccctcaagatccagtgtgtctcaggaaccatcag 3209
|||||
Sbjct: 161200 gtgatccctcaagatccagtgtgtctcaggaaccatcag 161160

Score = 289 bits (146), Expect = 6e-75
Identities = 188/202 (93%)
Strand = Plus / Minus

Query: 1877 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
|||||
Sbjct: 101522 agattgggagcggggcctcaacctctctggggggcagaggcagaggattagcctggccc 101463

Query: 1937 gcgcctgtctattccgaccgtcagatctacctgctggacgacccctgtctgtgtggacg 1996
|||||
Sbjct: 101462 gcgctgtctactccgaccgtcagatctacctgctggacgacccctgtcggccgtggacg 101403

Query: 1997 cccacgtggggaagcacatTTTTgaggagtgcattaagaagacactcagggggaagacgg 2056
|||||
Sbjct: 101402 cccacgtggggaagcacgtctTTTgaggagtgcattaagaagacgctcaggggaaagacag 101343

Query: 2057 tcgtcctggtgacccaccagct 2078
|||||
Sbjct: 101342 tcgtcctggtgacccaccagct 101321

Score = 278 bits (140), Expect = 2e-71
Identities = 140/140 (100%)

Strand = Plus / Minus

Query: 2080 cagtacttagaattttgtggccagatcattttgttgaaaaatgggaaaatctgtgaaaat 2139
|||||
Sbjct: 184181 cagtacttagaattttgtggccagatcattttgttgaaaaatgggaaaatctgtgaaaat 184122

Query: 2140 ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 2199
|||||
Sbjct: 184121 ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 184062

Query: 2200 cacaaggaagccacttcggt 2219
|||||
Sbjct: 184061 cacaaggaagccacttcggt 184042

Score = 278 bits (140), Expect = 2e-71
Identities = 140/140 (100%)
Strand = Plus / Minus

Query: 2445 gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 2504
|||||
Sbjct: 172992 gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 172933

Query: 2505 attctccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 2564
|||||
Sbjct: 172932 attctccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 172873

Query: 2565 tgaagacttcatcagccagt 2584
|||||
Sbjct: 172872 tgaagacttcatcagccagt 172853

Score = 252 bits (127), Expect = 1e-63
Identities = 127/127 (100%)
Strand = Plus / Minus

Query: 1679 agatgcacttgctcgagggctcggtgggggtgcaggaagcctggcctatgtccccagc 1738
|||||
Sbjct: 191439 agatgcacttgctcgagggctcggtgggggtgcaggaagcctggcctatgtccccagc 191380

Query: 1739 aggcctggatcgtcagcggaacatcagggagaacatcctcatgggaggcgcatatgaca 1798
|||||
Sbjct: 191379 aggcctggatcgtcagcggaacatcagggagaacatcctcatgggaggcgcatatgaca 191320

Query: 1799 aggcccg 1805
|||||
Sbjct: 191319 aggcccg 191313

Score = 226 bits (114), Expect = 8e-56
Identities = 114/114 (100%)
Strand = Plus / Minus

Query: 3289 atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 3348
|||||

Sbjct: 156120 atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 156061

Query: 3349 gtgggggagagggcagctgctctgcattgccagggctgtgcttcgcaactccaag 3402

|||||
Sbjct: 156060 gtgggggagagggcagctgctctgcattgccagggctgtgcttcgcaactccaag 156007

Score = 188 bits (95), Expect = 2e-44
Identities = 95/95 (100%)
Strand = Plus / Minus

Query: 3566 aggtggtagaatttgatcggccggagggtactgcggaagaagcctgggtcattgttcgcag 3625

|||||
Sbjct: 153270 aggtggtagaatttgatcggccggagggtactgcggaagaagcctgggtcattgttcgcag 153211

Query: 3626 ccctcatggccacagccacttcttctactgagataa 3660

|||||
Sbjct: 153210 ccctcatggccacagccacttcttctactgagataa 153176

Score = 182 bits (92), Expect = 1e-42
Identities = 92/92 (100%)
Strand = Plus / Minus

Query: 2768 agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 2827

|||||
Sbjct: 164590 agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 164531

Query: 2828 cggctgtagagaggatactgcagtacatgaag 2859

|||||
Sbjct: 164530 cggctgtagagaggatactgcagtacatgaag 164499

Score = 161 bits (81), Expect = 4e-36
Identities = 81/81 (100%)
Strand = Plus / Minus

Query: 3208 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 3267

|||||
Sbjct: 156871 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 156812

Query: 3268 aggacattcctgaccaaggcc 3288

|||||
Sbjct: 156811 aggacattcctgaccaaggcc 156791

Score = 147 bits (74), Expect = 6e-32
Identities = 74/74 (100%)
Strand = Plus / Minus

Query: 1805 gatacctccaggtgctccactgtgctccctgaatcgggacctggaacttctgccctttg 1864

|||||
Sbjct: 189201 gatacctccaggtgctccactgtgctccctgaatcgggacctggaacttctgccctttg 189142

Query: 1865 gagacatgacagag 1878

|||||||
Sbjct: 189141 gagacatgacagag 189128

Score = 147 bits (74), Expect = 6e-32
Identities = 74/74 (100%)
Strand = Plus / Minus

Query: 1607 aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 1666
|||||||
Sbjct: 194398 aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 194339

Query: 1667 ccatacctggaggag 1680
|||||||
Sbjct: 194338 ccatacctggaggag 194325